

Work Order ID 71298

Monday, June 27, 2011 2:35:24 PM



Item ID: D3510-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube Insert Assembly

Start Date: 6/27/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 7/1/2011 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

W

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3510	Rev C								
100	MORI SEIKI CNC LATHE LARGE	0.00							
Mori Seiki	Memo	0.00							
Mori Seiki CNC Lathe Large	Turn as per Dwg D3510 & Folio FA652 Ensure that DT8877A Plug fits in tube.								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
QC	Memo	0.00							
Quality Control									

MM.L 11/06/30

and 11/07/04

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Page 2

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Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS I

Memo

0.00

HAAS CNC vertical machine #1

1-Machine as per Folio FA652 and Dwg D3510

2-Deburr

ark 11/09/14
JH

2

0

Note:***** 250" dia holes are to opened to finish size by skidtube dept, and
missing .266" dia hole is to be drilled by skid dept.*****

130

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

ark 11/09/12

2

0

140

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

SL 11-09-15

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Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Drill .266" Dia hole using DT8877B as per Dwg D3510

2-Counter bore wearplate holes as per Dwg d3510.

3-open wearplate holes to .297 as per Dwg D3510.

4-Deburr

160

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

170

0.00



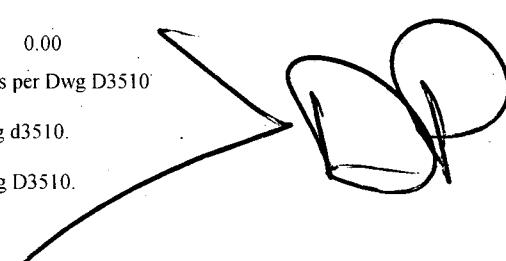
HandFinish

Chemical Conversion Coat per QS1005 4.1

Memo

0.00

Hand Finishing



11-9-16 (2)

S w/06/16

(2)

2x Ø m-ful/06/16

Work Order ID 71298

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Cust Item ID:

Required Date: 7/1/2011 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

180	QC3- Inspect Part Finish	0.00							
-----	--------------------------	------	--	--	--	--	--	--	--



QC	Memo	0.00							
----	------	------	--	--	--	--	--	--	--

Quality Control

2 BK 11-9-16

190	HandFinishing	0.00							
-----	---------------	------	--	--	--	--	--	--	--



HandFinish	Memo	0.00							
------------	------	------	--	--	--	--	--	--	--

Hand Finishing Install inserts as per Dwg D3510

2x Ø m-11/09/16

200	QC5- Inspect part completeness to step on W/O	0.00							
-----	---	------	--	--	--	--	--	--	--



QC	Memo	0.00							
----	------	------	--	--	--	--	--	--	--

Quality Control

Silva

(2)

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Cust Item ID:

Required Date: 7/1/2011 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

0.00

Packaging

11/9/16

220

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/9/16
ME 11-09-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, June 27, 2011 2:35:21 PM

Page 1

Work Order ID: 71298

Parent Item: D3510-041

Parent Item Name: Skidtube Insert Assembly

Start Date: 6/27/2011

Required Date: 7/1/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 06-10-12 JLM
IPP Rev:B ALES-1032 and ALS4-428 insert now used ECN 1036 DD
IPP Rev:C Revised manufacturing steps for LG 08-09-29 Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

ALS4-1032-225 Purchased

No

190

Each

728.0000

6

12



Insert

Location

Loc Qty

Loc Code

ST282

728

110768

213

117717

515

M118696

12x

M-L 11/09/16

ALS4-428-165 Purchased

No

190

Each

525.0000

2

4



Inserts

Location

Loc Qty

Loc Code

FP

486

117769

486

FP-B

39

114172

39

4x

M-L 11/09/16

ALS7-1032-130 Purchased

No

190

Each

1,209.000

2

4



Insert

Location

Loc Qty

Loc Code

ST282

1209

117717

1209

M118312

4x M-L 11/09/16

Picklist Print

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Page 2

Work Order ID: 71298

Parent Item: D3510-041

Parent Item Name: Skidtube Insert Assembly

Start Date: 6/27/2011

Required Date: 7/1/2011

Start Qty: 2.00

Required Qty: 2.00

M6061T6T3.500W.375

Purchased

No

100

f

24.0000

2.55

5.368421



6061-T6 RD Tube 3.50 X .375 W

Location

Loc Qty

Loc Code

MAT

12

118071

12

MAT014

12

117392

12

3 mm. L 11/06/2011

Monday, June 27, 2011 2:35:21 PM

Shop Packet Print

Page 2

DART AEROSPACE LTD		Work Order:	7120
Description: Skidtube Insert		Part Number:	D3510-041
Inspection Dwg: D3510 Rev: C		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

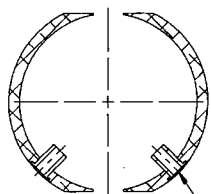
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø3.300	+/-0.010	3.310	✓		mic	CNC-05
Ø2.900	+/-0.010	2.941	✓		vern	JF-01
Ø2.750	+/-0.010	2.750	✓		vern	JF-01
R0.25 x 0.066	+/-0.010	0.25 x 0.066	✓		"	
15.00	+/-0.030	15.00	✓		tape	mm-L-02
0.063 x 45°	+/-0.010 x 0.5°	0.063 x 45°	✓		vern	JF-01
0.125 x 45°	+/-0.010 x 0.5°	0.125 x 45°	✓		vern	JF-01
5.270	+/-0.010	5.270	✓		✓	
3.265	+0.000/-0.010	3.258	✓		mic	CNC-05
30.50	+/-0.030	30.500	✓		tape	mm-L-02
9.515	+/-0.010	9.511	—		vern	CNC-02
6.875	+/-0.010	6.873	—		"	"
13.750	+/-0.010	13.745	—		"	"
1.600	+/-0.010	1.598	—		"	"
2.165	+/-0.010	2.165	—		"	"
6.735	+/-0.010	6.745	—		"	"
2.981 2.981	+/-0.010					
2.434	+/-0.010					
1.036	+/-0.010					
Ø0.266	+0.006/-0.001	0.266	—		vern	ML-06
Ø0.391	+/-0.010	0.391	—		"	"
Ø0.516 x 0.100	+/-0.010	0.516 x 0.100	—		"	"

Measured by: MM/L/ark	Audited by: SL	Prototype Approval:	N/A
Date: 11/06/28	Date: 11-09-15	Date:	N/A

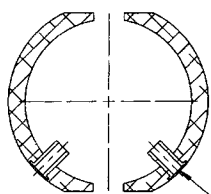
Rev	Date	Change	Revised by	Approved
A	09.06.01	New Issue	KJ	AK

D3510-041 SKIDTUBE INSERT



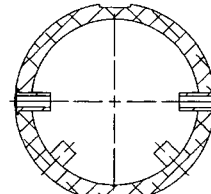
SECTION A-A

AFTER FINISH,
INSTALL AELS-1032-130
(2 PLACES)



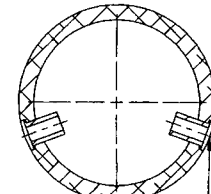
SECTION B-B

AFTER FINISH,
INSTALL AELS-1032-225
(4 PLACES)



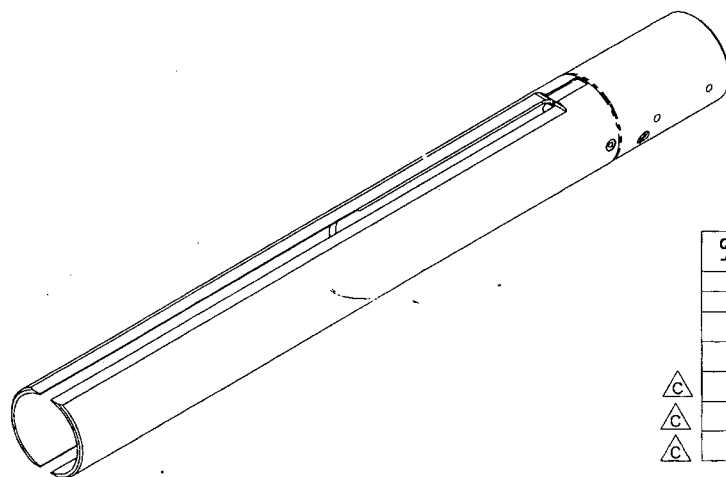
SECTION C-C

AFTER FINISH,
INSTALL AELS-1032-225
(2 PLACES)



SECTION D-D

AFTER FINISH,
INSTALL ALS4-428-165
(2 PLACES)



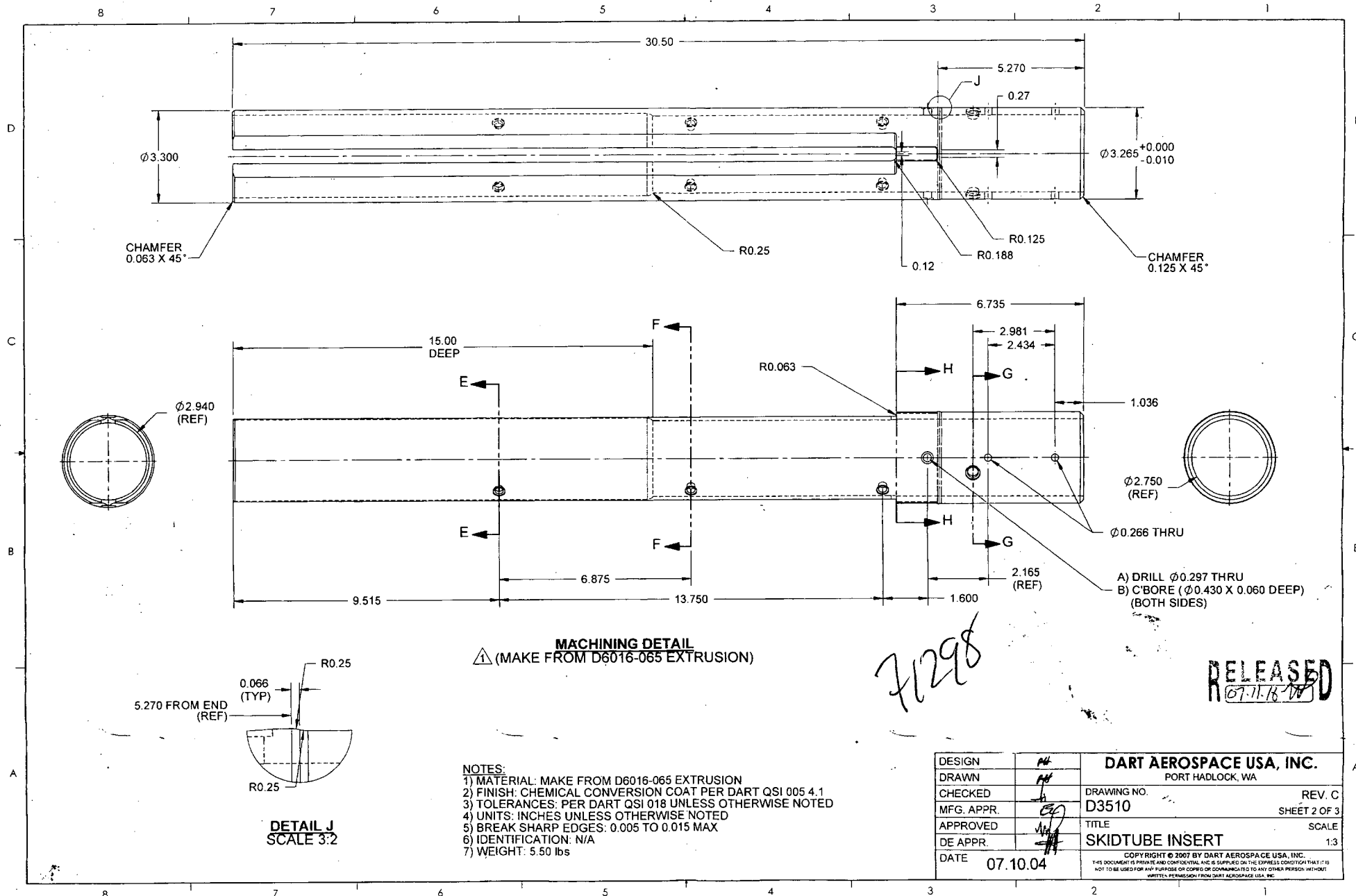
PARTS LIST

QTY -041	PART NUMBER	DESCRIPTION
X	D3510-041	SKIDTUBE INSERT
1	D6016-065	EXTRUSION
2	AELS-1032-130	INSERT
6	AELS-1032-225	INSERT
2	ALS4-428-165	INSERT

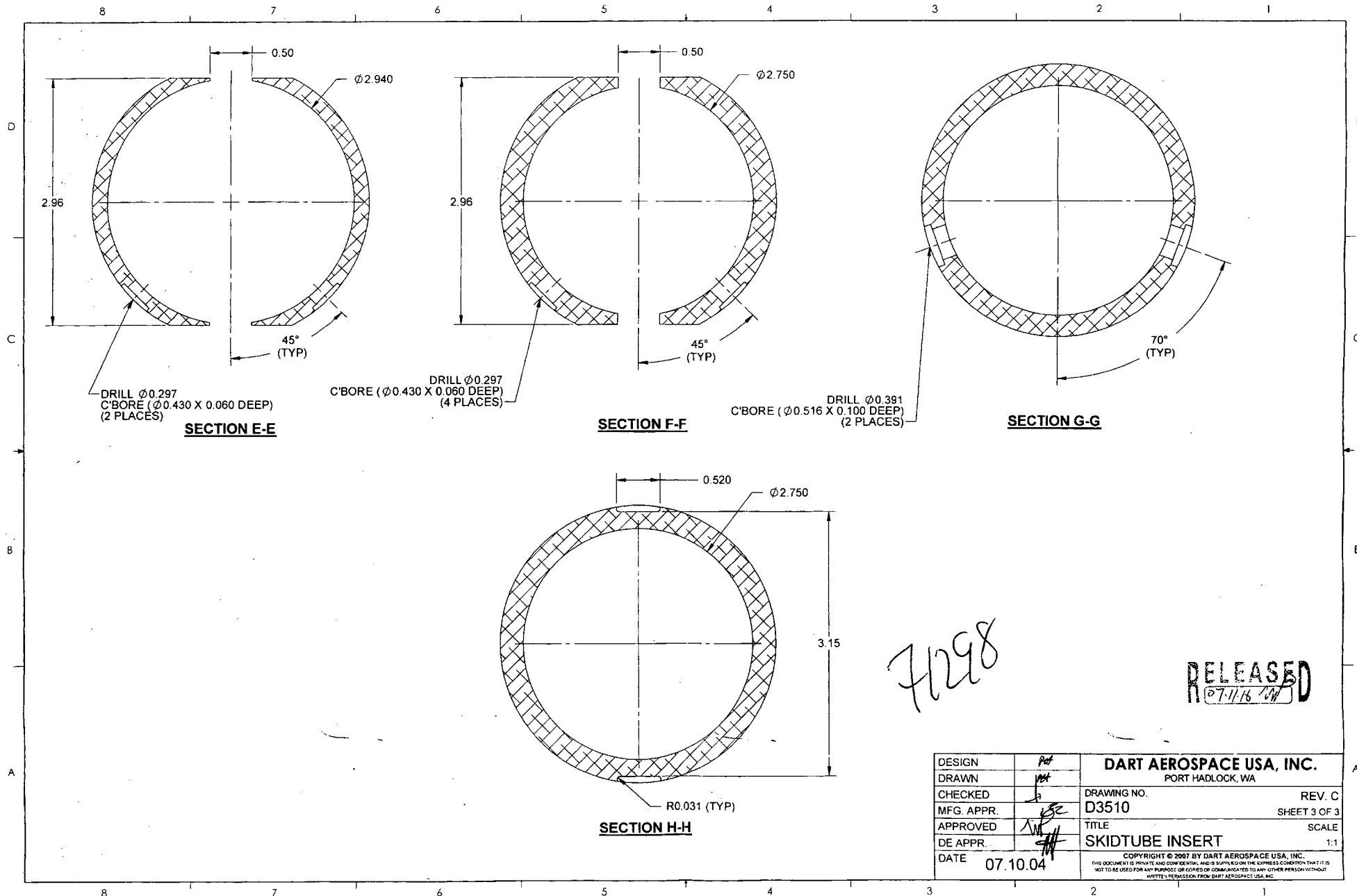
C	UPDATE DRAWING FORMAT AND CLARITY FOR MFG. CHANGE INSERTS FOR EASE OF INSTALLATION	PH	07.10.04
B	UPDATE DIMENSIONS	PH	06.09.20
A	NEW ISSUE	PH	06.04.21
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA DRAWING NO. D3510 TITLE SKIDTUBE INSERT SCALE 1:3 <small>COPYRIGHT © 2007 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	
DRAWN	PH		
CHECKED	PH		
MFG. APPR.	PH		
APPROVED	PH		
DE APPR.	PH	REV. C	
DATE	07.10.04	SHEET 1 OF 3	

RELEASED
07.11.16

WLO 71298



DESIGN	PH	DART AEROSPACE USA, INC.	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED	J	DRAWING NO.	REV. C
MFG. APPR.	GP	D3510	SHEET 2 OF 3
APPROVED	WJ	TITLE	SCALE
DE APPR.	WJ	SKITUBE INSERT	1.3
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71298

RELEASED
07-11-16

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DRAWN	JST	PORT HADLOCK, WA	
CHECKED	J	DRAWING NO.	REV. C
MFG. APPR.	BC	D3510	SHEET 3 OF 3
APPROVED	AM	TITLE	SCALE
DE APPR.	TH	SKIDTUBE INSERT	1:1
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